



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/331,729	08/26/1999	FRANK OSAN	514425-3732	2014

7590 12/19/2002

Ashley I. Pezzner  
Conolly Bove Lodge & Hutz LLP  
1220 Market Street  
P.O. Box 2207  
Wilmington, DE 19899

EXAMINER

NOTE, JANIS L

ART UNIT	PAPER NUMBER
----------	--------------

1756

DATE MAILED: 12/19/2002

20

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/331,729

Applicant(s)

OSAN et al

Examiner

J. DOTE

Group Art Unit

1756

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☒ Responsive to communication(s) filed on 10/7/02; 11/4/02
- ☒ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 35 - 57 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☒ Claim(s) 53 is/are allowed.
- ☒ Claim(s) 35 - 52, 54 - 57 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☒ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☒ All ☐ Some\* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
- ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 17
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

1. The examiner acknowledges the cancellation of claims 16-34 and the addition of claims 35-57 filed in Paper No. 17 on Oct. 7, 2002 (cert. mail. Sep. 30, 2002). Claims 35-57 are pending.

2. The objections to the specification under 35 U.S.C. 132 set forth in the office action mailed Mar. 28, 2002, Paper No. 15, paragraph 4, have been withdrawn in response to the replacement paragraphs at page 12, line 13, and at page 13, line 3, of the specification filed in Paper No. 17.

The objections to claims 20 and 32 set forth in Paper No. 15, paragraphs 7 and 12, respectively, have been mooted by the cancellation of claims 20 and 32.

The rejections of claims under 35 U.S.C. 112, second paragraph, set forth in Paper No. 15, paragraph 9, have been mooted by the cancellation of claims 22, 24, 26, 28, 33, and 34.

The rejections of claims under 35 U.S.C. 112, first paragraph, set forth in Paper No. 15, paragraph 11, have been mooted by the cancellation of claims 16, 17, 22, 24, 29, 33, and 34.

3. The disclosure is objected to because of the following informalities:

1) The specification discloses liquid toners and "liquid dried" systems that comprise an electrolytic solution. See the

instant specification, replacement paragraph at page 1, line 1, of the specification filed in Paper No. 14 on Feb. 22, 2002, and toner preparation methods 4 and 5 at page 17. However, the specification identifies ISOPAR H as an electrolytic solution. ISOPAR H is known to be a non-polar hydrocarbon (more specifically, an isoparaffinic) liquid. See, for example, US 5,019,477, col. 6, lines 27-37. Hydrocarbon liquids are not electrolytic in the conventional meaning of the term. Thus, it is not clear what applicants mean by the term "electrolytic solution."

2) Table 1 discloses that the toners of Examples 20-30 and Comparative Examples 5 and 6 are made by Toner preparation methods 4 and 5. It is not clear which examples are made by which method. It is also not clear how the examples are made by both methods 4 and 5. Method 4 is not the same as method 5.

Appropriate correction is required.

Applicants' arguments filed in Paper No. 17 have been fully considered but they are not persuasive.

(1) Applicants assert that they have amended the term "electrolytic solution" to "carrier liquid."

As noted in the objection, applicants' amendment did not amend the specification to replace the term "electrolytic solution" with -- carrier liquid --.

(2) Applicants stated that they are reviewing the records to determine which method was followed in the examples and will amend the specification accordingly.

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

1) In claim 37, the recitation "at least one polar functional group" lacks antecedent basis in the specification. See the specification at page 12, lines 5-12, and page 13, lines 1-2, which disclose a polyolefin having a cyclic structure that can have carboxyl, hydroxyl, or amino groups. The recitation "polar functional group" encompasses other non-disclosed polar groups, e.g., cyano groups, besides the disclosed carboxyl, hydroxyl, and amino groups.

3) In claims 39 and 40, the recitation "an ionomer" lacks antecedent basis in the specification. See the specification, page 13, lines 16-31, which discloses that "a polyolefin resin of a cyclic structure comprising a carboxyl groups introduced therein" having uniformly dispersed therein fine particles of a metal is an ionomer having crosslinked structure. The term "ionomer," recited in instant claims 39 and 40, is broader than

the disclosed carboxyl groups and includes other non-carboxyl-containing ionomers.

The recited phrases are not considered new matter because they were previously recited in originally filed claims 3 and 5, respectively.

5. The term "liquid dried system" recited in claim 53 is interpreted to refer to a liquid toner that comprises toner particles that are obtained by a dry polymerization method, which forms toner particles by interfacial polymerization. See instant specification, Toner preparation method 4 at page 17. Applicants in Paper No. 7, page 9, lines 4-5, agree with the examiner's interpretation of the term "liquid dried system."

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 55 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 55 is indefinite in the phrase "[t]he liquid toner of claimed in claim 35" for lack of unambiguous antecedent basis. Claim 35 recites at toner. There is no recitation of a liquid toner in claim 35.

Claim 55 is further indefinite in the phrase "7% to less than 50% by weight" because it is not clear what is the basis of said weight percentages (e.g., the binder resin, the liquid toner, etc.)

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 35-52 and 55-57 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

(1) Claims 35-47 and 55 recite a second resin or resin fraction having an Mn of 7,500 or more and a Tg lower than 70°C

in an amount of less than 50% by weight based on the entire binder resin. The originally filed specification does not provide an adequate written description of such a second resin for the following reasons:

(a) The originally filed specification discloses that a second resin or resin fraction having a Mn of 7,500 or more, a Mw of 15,000 or more, and an intrinsic viscosity (i.v.) of 0.25 dl/g or more, is present in an amount of less than 50% by weight based on the weight of binder resin. See the originally filed specification at page 4, lines 21-27, and examples 2, 8, 10, 19, 21, and 30, and originally filed claim 1. Originally filed claim 1 and the originally filed specification require that the second resin or resin fraction having a Mn of 7,500 or more added in an amount of less than 50 % by weight of the entire binder resin have certain minimum values of intrinsic viscosity, and Mw. The second resin or resin fraction recited in instant claim 35 is broader than the disclosed second resin or resin fraction because it includes resins having a Mw of less than 15,000 and an intrinsic viscosity of less than 0.25 dl/g. There is no original disclosure of the broader conditions on the second resin recited in claim 35.

(b) The originally filed specification does not disclose a second resin or resin fraction having a Mn of 15,000 or more and having a Tg of lower than 70°C. The originally filed



specification at page 7, line 12, discloses that it is the first resin having a Mn of 7,500 or less that has a Tg of "preferably lower than 70°," not the second resin having a Mn of 7,500 or more. Furthermore, the particular polyolefins having a cyclic structure in sample nos. 2 and 9 of the originally filed specification do not provide an adequate written description of the broader second resin having a Mn of 7,500 or more recited in claim 35. Sample nos. 2 and 9 exemplify particular polyolefin resins having a cyclic structure, which have particular Mw's, intrinsic viscosities, and HDT's. The broader generic second resin having a Mn of 7,500 or more recited in claim 35 encompasses polyolefins outside the scope of sample nos. 2 and 9.

(2) Instant claim 36 recites "hybrid polymers." The originally filed specification does not provide an adequate written description of said hybrid polymers. The originally filed specification discloses "a mixture or a hybrid polymers [sic] of any of the mentioned polymers" at page 11, lines 22-25. Originally filed claim 2 recites "other resin comprising one of a polyester resin, an epoxy resin . . . and other acrylate resin, a mixture, hybrid polymers or blend of any of them." The "any of them" refer to the seven particular polymers recited in originally filed claim 2. The term "hybrid polymers," recited in instant claim 36, is broader than the disclosed hybrid polymers because it includes polymers comprising polymers not disclosed at

page 11, lines 22-25, or recited in originally filed claim 2, such as polycarbonates or polymers of vinyl chloride.

(3) Claim 42 recites that the polyolefin resin having a cyclic structure of claim 35 has a crosslinked structure "by a diene monomer together with ester, amide, sulfide, or ether, is reacted with an acyclic olefin and a cycloolefin to obtain a terpolymeric polyolefin having a cyclic structure."

The originally filed specification does not provide an adequate written description of said terpolymeric polyolefin. The originally filed specification at page 13, lines 3-10, discloses that a crosslinked structure may be introduced into the polyolefin resin having a cyclic structure by reacting "a diene monomer, such as norbornadiene or cyclohexadiene, together with an acyclic olefin monomer and a cycloolefin monomer, followed by reacting the system, thereby obtaining a terpolymeric polyolefin having a cyclic structure." In other words, the reaction of a diene monomer, such as norbornadiene or cyclohexadiene, with an acyclic olefin and a cycloolefin monomer produces a terpolymer with a crosslinked structure. The specification at page 13, lines 10-12, further discloses that the resulting terpolymer has "a terminal showing activity even without a crosslinking agent" (emphasis added). Originally filed claim 7 recites that a polyolefin having a cyclic structure has a "structure crosslinked by a diene, ester, amide, sulfide or ether." Thus, there is no

disclosure in the originally filed specification of a terpolymer resin polyolefin resin obtained by reacting: (1) a polyolefin having a structure crosslinked by a diene monomer with an ester, amide, sulfide or ether; (2) an acyclic olefin; and (3) a cycloolefin as recited in instant claim 42.

(4) Instant claim 55 recites that said resin or said second resin fraction is present in "an amount from 7% to less than 50% by weight." The originally filed specification does not provide an adequate written description of said amount. The originally filed specification discloses that a second resin or resin fraction having a Mn of 7,500 or more, a Mw of 15,000 or more, and an intrinsic viscosity (i.v.) of 0.25 dl/g or more, can be present in an amount of "less than 50% by weight based on the weight of binder resin." See the originally filed specification at page 4, lines 21-27, and originally filed claim 1. There is no disclosure in the originally filed specification for the recited lower limit of 7% by weight. Applicants assert that example 30 of the instant specification provides support for that amount. See Paper No. 17, page 9, lines 1-2. However, example 30 exemplifies a liquid toner comprising 24 wt% of polyolefin resin No. 1, 7.4 wt% of a polyolefin resin No. 2, and 8 wt% of polymer No. 9. It is not clear from the specification what is the basis of said weight percentages. In any event, the

amount of 7.4 wt% does not provide antecedent basis for the amount of 7 wt% recited in instant claim 55.

(5) Instant claim 48 recites a second resin or resin fraction having a Mn of 7,500 or more but less than 25,000 and a third resin or resin fraction having a Mn of 25,000 or more.

The originally filed specification does not provide an adequate written description of such a combination of resins. The originally filed specification discloses a second resin having a Mn of 7,500 or more, a Mw of 15,000 or more, and an intrinsic viscosity (i.v.) of 0.25 dl/g or more. The specification discloses that said second resin or resin fraction is present in an amount of less than 50% by weight based on the weight of binder resin. See the originally filed specification at page 4, lines 21-27, and examples 8 and 19, and originally filed claims 1 and 12. Originally filed claims 1 and 12 and the originally filed specification require that the second resin or resin fraction having a Mn of 7,500 or more have certain minimum values of intrinsic viscosity and Mw; and that said second resin or resin fraction is present in an amount of less than 50% by weight of the entire binder resin. The specification at page 9, lines 10-15, further discloses that "if the amount of the high viscosity resin [i.e., the second resin or resin fraction having a Mn of 7,500 and the minimum values of Mw and intrinsic viscosity] used is 50% by weight or more based on the entire

binder resin, the uniform kneading properties extremely decline, impeding the toner performance. That is, a high grade image, i.e., a sharp image with high fixing strength and excellent heat response, cannot be obtained."

The disclosure in the originally filed specification at page 10, line 15, to page 11, line 11, regarding the presence of a resin or resin fraction having a Mn of 7,500 or more, but less than 25,000, and a resin or resin fraction of 25,000 more, in the binder resin, refers to the "second resin or resin fraction" having a Mn of 7,500 or more and the certain minimum values of Mw and intrinsic viscosity disclosed at page 4, lines 13-27 and page 7, lines 3-17: Also see instant examples 8 and 19 in Table 2. Example 8 exemplifies a toner comprising a binder resin that comprises a polyolefin resin comprising: (1) 60 wt% of a resin having a Mn of 3550; (2) 15 wt% of a resin having a Mn of 22,200, a Mw of 40,100, and an intrinsic viscosity of 0.7 dl/g; and (3) 14.5 wt% of a resin having a Mn of 27,700, a Mw of 66,100, and an intrinsic viscosity of 1.39 dl/g. The weight percentages are based on the total weight of the toner. The total amount of resins (2) and (3) is 33 wt% of the total binder resin. Resin (1) is the resin having a Mn or 7500 or less. Resins (2) and (3) satisfy the "second resin fraction" requirements of having a Mn of 7,500 or more, a Mw of 15,000 or

more, an intrinsic viscosity (i.v.) of 0.25 dl/g or more, and being present in an amount of less than 50 wt%.

Thus, the "second resin or resin fraction" and "third resin or resin fraction" recited in instant claim 48 is broader than the disclosed second resin or resin fraction having a Mn of 7,500 or more, a Mw of 15,000 or more, and an intrinsic viscosity (i.v.) of 0.25 dl/g or more, and being present in an amount of less than 50 wt% of the total binder resin. The recitations of the "second resin or resin fraction" and the "third resin or resin fraction" in instant claim 48 include resins having a Mw of less than 15,000 and an i.V. of less than 0.25 dl/g, and amounts of 50% by weight or more of the total binder resin.

(6) Instant claims 49-52, 56, and 57 recite a second resin or resin fraction having a Mn of 7,500 or more.

The originally filed specification does not provide an adequate written description of such a second resin or resin fraction having a Mn of 7,500 or more for the reasons set forth in item (1a), supra, which is incorporated herein by reference. In addition, the originally filed specification discloses that the second resin or resin fraction having a Mn of 7,500 and the minimum values of Mw and intrinsic viscosity is used in an amount of less than 50% by weight of the entire binder resin. See the originally filed specification, page 4, lines 19-28, and examples 21 and 24, and originally filed claim 1. The

specification at page 9, lines 10-15, further discloses that "if the amount of the high viscosity resin [i.e., the second resin or resin fraction having a Mn of 7,500 and the minimum values of Mw and intrinsic viscosity] used is 50% by weight or more based on the entire binder resin, the uniform kneading properties extremely decline, impeding the toner performance. That is, a high grade image, i.e., a sharp image with high fixing strength and excellent heat response, cannot be obtained." Thus, there is no disclosure in the originally filed specification for the presence of a second resin or resin fraction broadly recited in the instant claims.

Applicants' arguments filed in Paper No. 17 with respect to the rejection of claim 36 have been fully considered but they are not persuasive. Applicants assert that "hybrid mixtures" recited in instant claim 36 is supported in the original application in original claim 2.

Instant claim 36 recites "hybrid polymers." For the reasons set forth in the rejection in item (2) above, the originally filed specification does not provide an adequate written description of "hybrid polymers" as recited in instant claim 36.

10. Claim 51 is objected to because of the following informalities:

The misspelling "acylic."

Appropriate correction is required.

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

12. Claims 49-52 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 97/05529 (WO'529), as evidenced by applicants' admission at page 21 of the instant specification. See the PTO translation of WO'529 for cites.

WO'529 discloses toners that are within the compositional limitations of the instant claims. The toners comprise a binder resin, charge control agent, a colorant, and a functional imparting agent, such as HOECHST WAX E. See Toner preparation method I at pages 11 and 12, and Examples 1 and 2 of Table 2-1 at page 13. The binder resins in Examples 1 and 2 are as follows:

Example 1 - polyolefin having a cyclic structure, T745, which has a Mn of 3800 and a Tg of 68°C. See Table 3 at page 15. The binder resin is within the binder compositional limitation recited in instant claim 49.

Example 2 - a polyolefin resin having a cyclic structure comprising polyolefin T745 and the polyolefin having a cyclic structure S-8007, which has a Mn of 35,000, Mw of 70,000, and i.v. of 0.8 dl/g, in an amount of 33% by weight of the entire binder resin. See Table 3. The S-8007 is within the second



resin compositional limitations recited in instant claim 49. The polyolefin resin of WO'529 is within the scope of the compositional limitations of the polyolefin having a cyclic structure recited instant claims 50-52. T745 is identified by the instant specification at page 21 as a copolymer of ethylene and norbornene.

13. Claims 54 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO'529. See the PTO translation of WO'529 for cites.

WO'529 discloses a liquid toner that comprises 60 wt% of a carrier liquid, ISOPAR H, and 40 wt% of a mixture of solids comprising 1 part by weight of carbon black, 0.5 part by weight of a charge control agent, and 98.5 parts by weight of a binder resin. See the translation, Toner preparation method III at page 12, and Example 19 in Table 2-2 at page 14. Example 19 comprises a binder resin comprising a polyolefin having a cyclic structure comprising a resin having a Mn of 3,800 and a resin having a Mn of 35,000. The above liquid toner is within the compositional limitations recited in instant claim 54 and 57, except for the amount of binder resin, which must lie in the range of 85 to 95 wt%. However, WO'529 discloses that liquid toners can comprise 15 to 50 wt% of binder resin, 0-10 wt% of colorant, 0-5 wt% of a charge control agent, 0-10 wt% of a

functioning agent, such as a wax, and 50 to 70 wt% of an liquid carrier, based on the total weight of the liquid toner.

Translation, Table 1 at page 3. Thus, the reference teaches that the mixture of solids can be present in an amount of 30 to 50 wt% based on the total weight of the liquid toner, where the binder resin is present in the mixture of solids in an amount of 50 to 100 wt%. The amount range of 50 to 100 wt% encompasses the range of 85 to 95 wt% recited in instant claim 54. Accordingly, the amount of binder resin is a result-effective variable, the variation of which is presumably within the skill of the ordinary worker in the art.

It would have been obvious for a person having ordinary skill in the art, in view of the teachings of WO'529, to vary the amount of the binder resin, through routine experimentation, in the liquid toner disclosed by WO'529, such that the amount would be within the range of 85 to 95 wt% recited in instant claim 54, because that person would have had a reasonable expectation of successfully obtaining a liquid toner having the properties disclosed by WO'529. Translation, page 2, lines 8-13.

14. Applicants' arguments filed in Paper No. 17 with respect to the rejections over WO'529 in paragraphs 12 and 13 above have been fully considered but they are not persuasive. Applicants argue that WO'529 is not prior art. Applicants assert that they

have perfected their claim to foreign priority under 35 U.S.C. 119, by filing a verified English-language translation of the priority document, Japanese patent application Hei 8-348546, in Paper No. 19 on Nov. 4, 2002. Applicants argue that the translation provides antecedent basis for the subject matter recited in the instant claims.

The translation does not provide an adequate written description of the subject matter recited in instant claims 49-52, 54, and 57, as set forth under 35 U.S.C. 112, first paragraph, for the following reasons:

1) The translation does not disclose the generic "second resin or resin fraction having a Mn of 7,500 or more" as recited in the instant claims 49-52 and 57. Rather, the translation discloses a second resin or resin fraction having a Mn of 7,500 or more, a Mw of 15,000 or more, an intrinsic viscosity (i.v.) of 0.25 dl/g or more, and a hot deformation temperature (HDT) of 70°C or more. The translation also discloses that said second resin or resin fraction is present in an amount of less than 50% by weight based on the weight of binder resin. See the translation, page 3, lines 6-12; page 6, page 6, lines 15-24; and page 8, lines 10-20.

2) The translation does not disclose that the resin or resin fraction having a Mn of 7,500 or less has a Tg of lower than 70°C as recited in instant claim 49. Applicants have not indicated

where in the translation there is antecedent basis for such a resin or resin fraction having a Tg lower than 70°C.

3) The translation does not disclose the weight ranges recited in instant claim 54. The translation discloses a liquid toner comprising: (1) 40% by weight of a mixture consisting of 1 part by weight of carbon black, 0.5 part by weight of a charge control agent, and 98.5 parts by weight of a binder resin; and (2) 60% by weight of an electrolytic solution (Isopar H). See the translation, paragraph bridging pages 16 and 17.

Thus, the subject matter recited in claims 49-52, 54, and 57 are not entitled to the benefit of priority under 35 U.S.C. 119. Accordingly, the rejections over WO'529 stands.

15. Claim 53 is allowable over the prior art of record.

WO'529 does not teach a liquid dried polymerized system as recited in instant claim 53.

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this

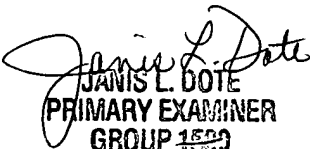
action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janis L. Dote whose telephone number is (703) 308-3625. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Mark Huff, can be reached on (703) 308-2464. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9311 (Rightfax) for after final faxes, and (703) 872-9310 for other official faxes.

Any inquiry of papers not received regarding this communication or earlier communications, or of a general nature or relating to the status of this application or proceeding should be directed should be directed to the Customer Service Center of Technology Center 1700 whose telephone number is (703) 306-5665.

JLD  
December 16, 2002

  
JANIS L. DOTE  
PRIMARY EXAMINER  
GROUP 1523  
1700